

On loose leaf:

Name

Math course last year (Algebra 1 or 2)

Course you want to take next year

Algebra 1 students:

Algebra 2 (212-2 level) (213-3 level) (291- honors)

Algebra 2 students:

Math Analysis (222-2 level) (223-3 level) (211-honors)

Any seat request (not people)

ex: Front 2 rows or back row

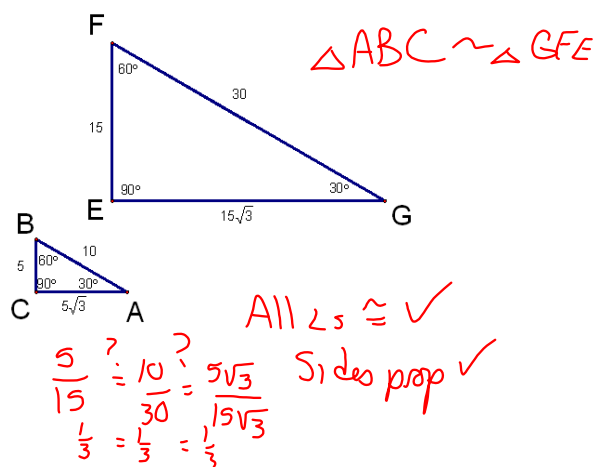
Projects are
not finished
yet!

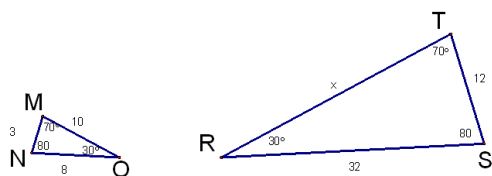
Quiz Next Thursday
6.1-6.3

6-2 Similar ~ Polygons

Two polygons are ~, if

1. corresponding \angle s are \cong
2. corresponding sides are proportional





$\triangle MNO \sim \triangle TSR$

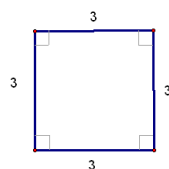
$$\begin{aligned} \angle M &\cong \angle T & \frac{MN}{TS} &= \frac{NO}{SR} = \frac{MO}{TR} \\ \angle N &\cong \angle S \\ \angle O &\cong \angle R & \frac{3}{12} &= \frac{8}{32} = \frac{10}{x} \end{aligned}$$

Scale Factor $1:4$

$$\frac{10}{4} = \frac{x}{32}$$

$$x = 40$$

Are the following figures similar?



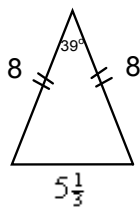
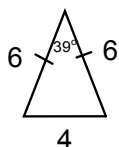
NO



$$\angle S \cong ? \text{ yes}$$

$$\text{sides prop? no } \frac{3}{2} \neq \frac{3}{6}$$

Are the following figures similar?



$\angle S \cong ?$ ✓

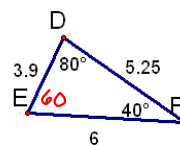
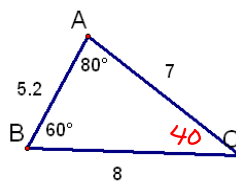
$$\frac{6}{8} = \frac{6}{8} = \frac{4}{5\frac{1}{3}} = \frac{4}{\frac{16}{3}}$$

yes

$\triangle s \sim$

$$.75 = .75 = .75$$

Are the following figures similar?



$$\angle S \cong ? \text{ yes}$$

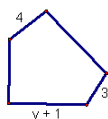
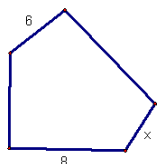
$$\text{sides prop? yes}$$

$$\begin{array}{l} \text{sm} \quad \text{mid} \quad \text{lg} \\ \frac{5.2}{3.9} = \frac{7}{5.25} = \frac{8}{6} \\ 1.\bar{3} = 1.\bar{3} = 1.\bar{3} \end{array}$$

Scale Factor

$$\frac{4}{3}$$

The pentagons are similar.
Solve for x.



$$\frac{x}{3} = \frac{6}{4}$$

$$x = 4.5$$

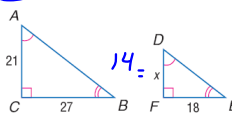
$$\frac{y+1}{8} = \frac{4}{6}$$

$$6(y+1) = 8 \cdot 4$$

$$y = 9\frac{1}{3}$$

Each pair of polygons is similar. Write a similarity statement, and find x, the measure(s) of the indicated side(s), and the scale factor.

6. \overline{DE}



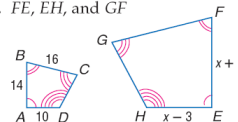
$$\triangle ABC \sim \triangle DEF$$

$$\frac{x}{27} = \frac{18}{27}$$

$$x = 18$$

S.F. $\frac{27}{18} = \frac{3}{2}$

7. \overline{FE} , \overline{EH} , and \overline{GF}



Homework
p. 293-295
#s 11-15, 17-20, 34-38